



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,427	08/23/2001	Ali Bani-Hashemi	2001 P 05443 US	1376
7590 01/11/2006			EXAMINER	
Siemens Corporation Intellectual Property Department 186 Wood Avenue South Iselin, NJ 08830			BRIER, JEFFERY A	
			ART UNIT	PAPER NUMBER
			2672	

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/818,427

Applicant(s)

BANI-HASHEMI ET AL.

Examiner

Jeffery A. Brier

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13, 15-26, 29-35 and 37-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13, 15-26, 29-35 and 37-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 8/16/2005 has been entered.

Response to Arguments

2. Applicant's arguments and amendments to the claims concerning the 101 rejection filed 8/16/2005 have been fully considered and they are persuasive to overcome the 101 rejection.
3. Applicant's arguments concerning the 112 rejection filed 8/16/2005 have been fully considered but they are not persuasive because the claim does not provide for a method of how the aligning step uses the stereo display "so that the instrument moves toward alignment with the target". In amended claim 13 in the preamble the instrument appears to be an actual instrument, in the identifying step the instrument is not identified as actual or virtual (it appears to be virtual since a graphical axis marker on the instrument is being identified), and in the aligning step it is not clear if the virtual instrument is being realigned or the actual instrument. The same rationale applies to remaining independent claims. Dependent claim 16 does not claim if the instrument is an actual instrument or a virtual instrument. If it is an actual instrument then how does this step select an "existing" feature of the actual instrument to be a graphical axis marker since the actual instrument is not made of graphical entities but rather actual entities. Additionally claim 16 does not clearly claim whether the graphical axis marker

Art Unit: 2672

in the claim 16 is the same graphical axis marker found in parent claim 13 or another graphical axis marker in addition to the previously claimed graphical axis marker.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 13, 15-26, 29-35, and 37-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 13 and 15-22:

In amended claim 13 in the preamble the instrument is an actual instrument, in the identifying step the instrument is not identified as actual or virtual (it appears to be virtual since a graphical axis marker on the instrument is being identified), and in the aligning step it is not clear if a virtual instrument or an actual instrument is being realigned. If the virtual instrument is being aligned, then the claim is incomplete because it does not describe how without the user moving the real instrument the virtual instrument will be moved towards alignment with the target. A stereo display alone does not move the actual instrument. The stereo display enables the operator of the instrument to know the location of the instrument, thereby allowing the operator to move the actual instrument towards the target.

In view of the newly added providing and displaying steps the identifying step does not clearly claim whether the “at least one graphical axis marker on the instrument” is the same graphical axis marker rendered in the rendering step and displayed in the displaying step or is a newly claimed graphical axis marker.

If the identifying step is adding a graphical axis marker onto the virtual instrument then the providing step and the displaying step need to be placed after the identifying step to ensure there is practical utility for this identified graphical axis marker step because without the stereo display displaying this identified graphical axis marker and graphics path to the operator, the operator will not be able to use this valuable information to more accurately align the actual instrument to the actual target.

Claim 16 does not claim if the instrument is an actual instrument or a virtual instrument. If it is an actual instrument then how does this step select an “existing” feature of the actual instrument to be a graphical axis marker since the actual instrument is not made of graphical entities but rather actual entities. Additionally claim 16 does not clearly claim whether the graphical axis marker in the claim 16 is the same graphical axis marker found in parent claim 13 or another graphical axis marker in addition to the previously claimed graphical axis marker.

Claims 23-26, 29, 30, 40, and 41:

In the aligning step the virtual instrument is being moved towards the target by using a stereo display. This claim is incomplete because it does not describe how without the user moving the actual instrument the virtual instrument will be moved

Art Unit: 2672

towards alignment with the target. A stereo display alone does not move the actual instrument. The stereo display enables the operator of the instrument to know the location of the instrument, thereby allowing the operator to move the actual instrument towards the target.

In the last line "the target" lacks antecedent basis in the claim because it does not refer clearly to the earlier claimed "the virtual target point" and because earlier an "actual target" was claimed.

Claims 31-34:

In the aligning step the virtual instrument is being moved towards the target by using a stereo display. This claim is incomplete because it does not describe how without the user moving the actual instrument (or changing the pose of the actual instrument) the virtual instrument will be moved towards alignment with the target. A stereo display alone does not move the actual instrument. The stereo display enables the operator of the instrument to know the location of the instrument, thereby allowing the operator to move the actual instrument towards the target.

In the last line "the target" lacks antecedent basis in the claim because it does not refer clearly to the earlier claimed "the virtual target point" and because earlier an "actual target" was claimed.

If the choosing step is choosing the orientation of the graphical representation on the stereo display then the providing step and the displaying step need to be placed after the choosing step to ensure there is practical utility for this choosing an orientation

Art Unit: 2672

step because without the stereo display displaying the chosen orientation of the graphical representation to the operator, the operator will not be able to use this valuable information to more accurately align the actual instrument to the actual target.

Claims 35, 38, and 39:

In the aligning step the virtual instrument is being moved towards the target by using a stereo display. This claim is incomplete because it does not describe how without the user moving the actual instrument the virtual instrument will be moved towards alignment with the target. A stereo display alone does not move the actual instrument. The stereo display enables the operator of the instrument to know the location of the instrument, thereby allowing the operator to move the actual instrument towards the target.

In the last line "the target" lacks antecedent basis in the claim because it does not refer clearly to the earlier claimed "the virtual target point" and because earlier an "actual target" was claimed.

The location of the rendering graphical information step needs to be before the newly added providing step and displaying step to ensure there is practical utility for this rendering graphical information step because without the stereo display displaying this information to the operator, the operator will not be able to use this valuable information to more accurately align the actual instrument to the actual target.

Claim 37:

In the aligning step the virtual instrument is being moved towards the target by using a stereo display. This claim is incomplete because it does not describe how without the user moving the actual instrument the virtual instrument will be moved towards alignment with the target. A stereo display alone does not move the actual instrument. The stereo display enables the operator of the instrument to know the location of the instrument, thereby allowing the operator to move the actual instrument towards the target.

In the last line "the target" lacks antecedent basis in the claim because it does not refer clearly to the earlier claimed "the virtual target point" and because earlier an "actual target" was claimed.

Also the last six lines are confusing because "such that information corresponding to the distance... by repositioning the virtual instrument... with the target point" because the information observed is not clear and since it may only be claiming observing the displayed distance between the displayed virtual instrument and the virtual target point which is not seen to be different from the cited prior art method of allowing the user to observe the distance between the instrument and the target by observing the displayed distance between the displayed instrument and displayed target. The claimed "information" needs to be better claimed to distinguish it from conventional methods of observing the distance.

Art Unit: 2672

6. A prior art rejection cannot be made because the metes and bounds of the claims are not definite and because the specification does not limit questionable claim limitations. Thus, an indication of allowability would be premature. In re Steele, 305 F.2d 859, 134 USPQ 292 (CCPA 1962) (it is improper to rely on speculative assumptions regarding the meaning of a claim and then base a rejection under 35 U.S.C. 103 on these assumptions). Claim amendments are necessary to overcome the 112 rejections.

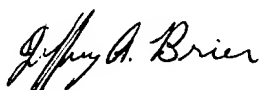
7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2672

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-7656. The examiner can normally be reached on M-F from 7:00 to 3:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffery A Brier
Primary Examiner
Art Unit 2672